Osteochondral Allograft Transplantation (OCA) and Meniscal Allograft Transplantation (MAT) and High Tibial Osteotomy (HTO) Protocol

	Weight-baring	Brace	Range of Motion	Exercises
Phase 1 0-2 weeks	Heel touch only	Locked in full extension at all times Off for hygiene and home exercise only	Gentle passive 0-90° CPM 0-90°	Calf pumps, patellar mobilization, quadriceps tightening sets and SLR in brace at home
Phase 2	2-6 weeks: Heel touch	2-8 weeks: Unlocked	Advance as tolerated	2-6 weeks: Add side-lying hip and core,
2-8 weeks	only	0-90°	with caution during	advance quad set and stretching (a)
	6-8 weeks: Advance 25% weekly and progress to full with normalized gait pattern	Off at night for sleeping	flexion >90° to protect post horn of meniscus	6-8 weeks: Addition of heel raises, total gym (closed chain), gait normalization, eccentric quads, eccentric hamstrings
		Discontinue brace at 8 weeks		
				Advance core work with hip, gluteal and core strengthening
Phase 3	Full	None	Full	Progress closed chain activities
8-12 weeks				Advance hamstring exercises, proprioception & balance exercises, lunges & leg press 0-90° only
				Advance core work with hip, gluteal and core strengthening
				Begin Stationary Bike at 10 weeks
Phase 4	s Full None	None	Full	Progress Phase III exercises and
3-6 months			functional activities : walking lunges, planks, bridges, Swiss ball, half-Bosu exercises	

				Advance core work with hip, gluteal and core strengthening				
Phase 5	Full	None	Full	Advance non-impact activity				
6-12 months				No running, jumping, pivoting, or sports participation unless cleared by MD				
CPM – continuous passive motion machine; SLR – Straight-leg raise								
(a) Avoid any tibial rotation for first 8 weeks to protect meniscus								